the

MIRACLE DAHLIA GARDEN

of Curtis Redfern

SANTA BARBARA, CALIFORNIA

1950

In the 29th verse of the first chapter of Genesis, it is written "And God said: Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed; to you it shall be for meat."

In the ensuing generations of the long ago pollen carried by insects, wind, etc., was carried from blossom to blossom and the ripened seed produced other plants of the floral world. In future generations man learned he could aid pollenation by gathering pollen and transferring it to the pistils of other flowers by using a camel's hair brush.

Improved varieties were selected from many seedlings and in this way new varieties became established by plant propagation or re-seeding.

We now come to Gregor Mendel, universally considered to be the Father of Heredity. He was born in Austria in 1822 and died in 1884. He was a monk in the little town of Brunn. He became interested in botany and carried on experiments with the common garden pea. Much of his knowledge came from self-pollenation or inbreeding. He kept copious records of his experiments and eventually boiled down his findings in a small pamphlet presented to the Scientific Society of which he was a member. His momentous discovery was neglected by his own generation and only brought to the attention of the world in 1900 when his little pamphlet was again unearthed in a library in Brunn by three European scientists (De Vries, Correns and Tschermak, who were also interested in heredity.)

While the fact of heredity had been known for thousands of years, I, too, was interested in producing seedlings from dahlias in line with Gregor Mendels experiments. In 1947 I began on dahlias. With a paralyzed left hand and arm, I had to work with the thumb and index finger of my right hand. When a dahlia showed its open pollen center, I placed my thumb on the center and massaged the pollen in a circular motion which engaged the pistils of the surrounding florets. Each floret is a true flower in itself with a short, thread-like pistil inclined to be sticky. This pistil received the pollen from the action of my thumb and thus, by inbreeding, seed pods soon developed. I also produced second generation seed from gladiolus and amarylis, taking pollen from the stamens of the open flowers, using my thumb and index finger to complete the inbreeding by gently rubbing the pollen into the pistils. I have some difficulty with irises but I have shown friends how to transfer the pollen to the sticky, lip-like pistil and seed pods developed last year.

Friends of the Dahlia Society of California, of which I was president for eight years, write me they produced Mendelian dahlia seeds last year and that they recently planted new seeds.

I suggested your using your thumb on the pollen centers of roses, carnations and other flowers with pollen bearing stamens. Pistils, usually sticky, accept this pollen and seed production begins almost at once.

This year I will have second generation gladiolus seedlings bloom for the first time.

Hereafter I will offer Mendelian seed from named varieties of both dahlias and gladiolii at $10 per hundred. Seed of both will be ready for distribution in October.

Of the many thousands of named dahlias in the world the recent standardization booklets of the Central States and American Dahlia Societies list as standards five of my own introduction, Angelo Rossi, Burgundy, El Rubio, Mandalay and Polaris. Before this there were two dahlias of mine that were well-known throughout the world, Barbara Redfern and Bagdad. Any commercial dahlia breeder considers himself lucky to produce one outstanding new variety from each thousand seedlings grown. In 1948 and 1949 I grew 400 Mendelian seedlings. Last year at least fifty of these second generation seedlings were outstanding enough to be grown again. This is the equivalent of fifty thousand seedlings from only 400 second generation Mendelian seed. Visitors to my wonderful gardens at 1809 Cliff Drive this year will be amazed at the glorious beauty of these seedlings, which range from tiny three-inch miniatures to dahlias eleven and twelve inches in diameter.

You will also see several new dahlias in bloom which I expect to introduce in 1951. They are: THE CURTIS REDFERN, EL SUENO, SUSAN GIBSON, FRANCISCAN, and LA CONCHITA.

My garden, a short mile from the Santa Barbara channel, with the Channel Islands in full view sixteen miles farther West reminds one of Walt Whitman's "Leaves of Grass" poem which adorned the walls of the Setting Sun Arch in the Court of the Universe at the Panama Pacific Exposition in San Franciso in 1915.

"Facing West from California's shores
Inquiring, tireless, seeking what is yet unfound.
I, a child, very old, over waves, toward the house of maternity,
The land of migrations, look afar, look off the shores of my western sea,
The circle almost circled."

Had I been younger I might have been tempted to keep the technique of my discovery a trade secret, but I am now in my sixty-eighth year and decided to tell the world how I have succeeded. Last year I wrote the editors of the Dahlia (the Central States Dahlia Society) and the American Dahlia Society explaining in detail my technique and sent them photographs of my thumb and index finger technique. I suggested they might use my letter and thus inform you readers of my experiments.

Naturally, I was disappointed that the editors failed to publish the article I sent them; I still think every reader should have been told of my achievements.

You will be most welcome as a visitor to my garden this year.

My suggestion is that every reader of this pamphlet interested in flower propagation, both young and old, follow my experiments in his own way. I am bold enough to prophesy that you will thus revolutionize flower production throughout the world.

I am not a biologist, and have had only one year in botany in 1897 at the Los Angeles High School. Please write me of the success you have with any of your experiments. Thank you for reading this.

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